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Technical Report 982

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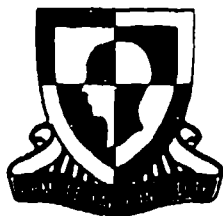
# Family Adjustment of Single Parents in the U.S. Army: An Empirical Analysis of Work Stressors and Adaptive Resources

Gary L. Bowen, Dennis K. Orthner, and Laura I. Zimmerman  
University of North Carolina at Chapel Hill

August 1993

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| 13. ABSTRACT (Maximum 200 words)<br><p>Based on a sample of 238 single parents who participated in the 1989 Army Soldier and Family Survey, this research examines the relative contributions of work stressors, family and community resources, and Army support resources to the family adjustment of single parents on active duty in the U.S. Army. Single fathers and mothers are compared across each of the variables in the analysis, and hierarchical multiple regression is used to determine the relative impact of potential stressors and resources on the family adjustment of single fathers and mothers.</p> <p>The results from the comparative analysis indicate that single fathers are more likely to report personal and family vulnerabilities and difficulties than single mothers, including lower overall family adjustment to the demands of Army life. The regression results indicate that the adaptation of single mother and single father families to Army demands is influenced more strongly by the availability of family, community, and Army resources than by the presence of work stressors.</p> <p>Although important differences are found in the operation of these resource variables for single fathers and mothers, internal family strength and the perceived</p> <div style="text-align: right;">(Continued)</div> |   |  |  |   |
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support of Army policies emerge as the two most important single predictors of the family adjustment of both single fathers and mothers. Based on these findings, recommendation focus on Army policies and program that encourage family strengths and provide supportive resources to families.

**Technical Report 982**

**Family Adjustment of Single Parents in the U.S. Army:  
An Empirical Analysis of Work Stressors and  
Adaptive Resources**

**Gary L. Bowen, Dennis K. Orthner, and Laura I. Zimmerman**  
University of North Carolina at Chapel Hill

**Leadership and Organizational Change Technical Area**  
**Paul A. Gade, Chief**

**Manpower and Personnel Research Division**  
**Zita M. Simutis, Director**

**U.S. Army Research Institute for the Behavioral and Social Sciences**  
**5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600**

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## **FOREWORD**

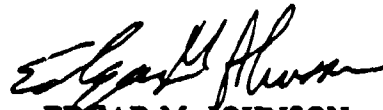
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The Army Family Research Program (AFRP) is a 5-year integrated research program that began in November 1986 in response to research mandates found in the Chief of Staff, U.S. Army, White Paper, 1983: The Army Family and the subsequent annual Army Family Action Plans. The objective of the research was to (1) determine the demographic characteristics of Army families, (2) identify ways to improve family adaptation to Army life, (3) increase the Army sense of community and partnership, (4) increase family support for retention, and (5) demonstrate the family factors that impact on individual and unit readiness.

This report examines the relative contribution of work stressors, family and community resources, and Army support resources to the family adjustment of single parents on active duty in the U.S. Army. The results from the comparative analysis of single fathers and mothers indicate that single fathers are more likely to report personal and family vulnerabilities and difficulties than single mothers, including lower overall family adjustment to the demands of Army life. The regression results indicate that the adaptation of single mother and single father families to Army demands is influenced more strongly by the availability of family, community, and Army resources than by the presence of work stressors. Based on these findings, recommendations focus on Army policies and programs that can encourage family strengths and provide supportive resources to families.

These findings will be helpful to Army family program managers as they streamline the service delivery system in light of the continuing effort to downsize the force.

The research was conducted under a Letter of Agreement between the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) and the U.S. Army Community and Family Support Center (CFSC) entitled "Sponsorship of ARI Army Family Research" dated 18 December 1986, which made CFSC the sponsor of the research. The work was done by the Leadership and Organizational Change Technical Area of the Manpower and Personnel Research Division of ARI with the assistance of the Research Triangle Institute, Caliber Associates, HumRRO, and Decision Science Consortium, Inc.

  
EDGAR M. JOHNSON  
Director

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Janet Griffith of the Research Triangle Institute provided valuable comments on the development of the research plan. D. Bruce Bell and John Tisak of the U.S. Army Research Institute for the Behavioral and Social Sciences and Joe Pittman of Auburn University offered substantive comments on the research plan and preliminary findings that improved the analysis and the preparation of the report. Although the contributions and feedback from these individuals are recognized, responsibility for the contents of the report lies solely with the authors.

In addition, the authors express their appreciation to the Army soldiers who gave their time and support to this research. Without their honest and thoughtful responses to our questions, this report and its recommendations would not have been possible.

# **FAMILY ADJUSTMENT OF SINGLE PARENTS IN THE U.S. ARMY: AN EMPIRICAL ANALYSIS OF WORK STRESSORS AND ADAPTIVE RESOURCES**

## **EXECUTIVE SUMMARY**

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### **Requirement:**

The report supports the *Army Family Action Plans* by providing data and analysis on soldiers who are single parents. This is the first major investigation comparing the stresses, strengths, and adaptation of single parent soldiers. It supports the need for data on how to assist soldiers in making successful adjustments to military demands.

### **Procedure:**

The data were collected in 1989 from a random sample of 11,035 soldiers. The analysis was conducted on 238 single parent soldiers in the sample. Single parents included nonmarried soldiers who had custody of children living in their households. Final analyses compared soldiers on the following variables: work stress, family and community resources, Army support resources, and family adjustment.

### **Findings:**

The results from the comparative analysis of single fathers and mothers indicate that single fathers are more likely to report personal and family vulnerabilities and difficulties than single mothers, including lower overall family adjustment to the demands of Army life. The regression results indicate that the adaptation of single mother and single father families to Army demands is influenced more strongly by the availability of family, community, and Army resources than by the presence of work stressors. Although important differences are found in the operation of these resource variables for single fathers and single mothers, internal family strength and the perceived support of Army policies emerge as the two most important single predictors of the family adjustment of both single fathers and single mothers.

### **Utilization of Findings:**

The findings from this research can facilitate the work of military service providers, trainers, leaders, and manpower personnel. Specific recommendations are offered to expand support program efforts to Army single parent families, offer more informal support to

families through unit and community support organizations, increase training on family-related issues for service providers and unit leaders, and conduct further, more intensive research on the special needs of military single parents.

# **FAMILY ADJUSTMENT OF SINGLE PARENTS IN THE U.S. ARMY: AN EMPIRICAL ANALYSIS OF WORK STRESSORS AND ADAPTIVE RESOURCES**

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# **FAMILY ADJUSTMENT OF SINGLE PARENTS IN THE U.S. ARMY: AN EMPIRICAL ANALYSIS OF WORK STRESSORS AND ADAPTIVE RESOURCES**

## **INTRODUCTION**

The military is no longer the province of single males. A mosaic of family and household types defines the military community today, including an increase in single parent households that has paralleled increasing rates of marital separation and divorce as well as unwed parenthood (Bowen & Orthner, 1986). As a consequence, the military's behavioral and social science research program has expanded from a focus on the adjustment of individual service members to also include a focus on understanding how the families of service members adjust to the demands of the military lifestyle.

As a work organization, the military dominates the lifestyle of the military family, requiring a range of personal and family sacrifices to accommodate the work mission (Bowen & Orthner, 1989; Orthner, Bowen, & Beare, 1990). Frequent relocations, extended family separations, and the general subservience of family needs to work objectives and requirements are frequently demanded of the family system in meeting organizational requirements. Segal (1989) uses Lewis Coser's notion of the "greedy" institution to describe the great demands that the military organization places on the time, energy, and commitments of its service members and their families.

At the same time, the military organization offers a number of economic and social supports to compensate families for their sacrifices and to help them meet the demands of the military lifestyle. In addition, the military prides itself on encouraging an informal context in both its work units and communities in which service members and their families may derive organizational and interpersonal support and develop a sense of connectedness and camaraderie. As concluded by Orthner and Bowen (1990):

the military organization and the family system of the service member become wedded through a lifestyle that absorbs the family through a unique combination of demands and supports. The balance between these demands and supports can make the organization and the family either allies or adversaries in their competition for the allegiance, loyalty, and commitment of the service member. (p. 2)

This encompassing impact of the military organization on the lives of its service members and their families through its combination of demands and supports underscores Erving Goffman's (1961) description of various military situations as examples of a "total institution."

Because of the established link between family adjustment and the organizational commitments and readiness of service members and their families (Bowen, 1986; Etheridge, 1989; Kirkland & Katz, 1989; Orthner & Pittman, 1986; Vernez & Zellman, 1987), the military services have sponsored a number of studies over the last decade to identify correlates of family adjustment (see Orthner & Bowen, 1990, for a review of this research). Yet, most of these studies have restricted their focus to married couples (e.g., Bowen, 1989a, 1989b; Bowen & Neenan, 1989; Janofsky, 1989). In many cases, they have focused on the adjustment of families to particular organizational demands, such as relocation (e.g., Bowen, 1989a; Croan, LeVine, & Blankinship, 1991; Lavee, McCubbin, & Patterson, 1985). Despite the increasing probability of having single parents serve in the U.S. military and the special challenges that these parents may face in reconciling work and family demands (Bowen & Orthner, 1986; Bowen, Orthner, Zimmerman, & Meehan, 1992; Wright, 1989), relatively little

attention have been given to identifying variables that may influence the adjustment of these families to the demands of the military lifestyle.

Drawing on secondary analysis of the 1989 Army Soldier and Family Survey, this investigation attempts to fill this void by examining the relative contribution of work stressors and two distinct types of adaptive resources to the family adjustment of single parents to the demands of Army life. In the analysis, the two types of adaptive resources, family and community resources and Army support resources, are examined for both their unique and their combined effects on the family adjustment of single parent respondents. Its aim is to propose ways in which the U.S. Army can strengthen the commitment and readiness of single parents through increasing their level of family adjustment.

Based on past research that suggests that enlisted single fathers are less satisfied with the military as a way of life and experience more difficulties than enlisted single mothers in managing their personal and family lives (Bowen, 1989c; Bowen, Orthner, Zimmerman, & Meehan, 1992), a separate, yet parallel analysis, is conducted for male and female respondents. Such an analysis strategy should provide the Army with a better understanding of the adjustment of single parent families and, if warranted, help tailor interventions and support services to single fathers and single mothers. In addition, to better understand differences in the work stressors, adaptive resources, and family adjustments of single parents, the main analysis is preceded by a comparative analysis of single fathers and single mothers across variables in the analysis.

The analysis is grounded in Hill's (1949) ABCX family crisis model, which was developed from his research on war induced separations and reunions. It is also informed by extensions of Hill's model, including Burr's (1973) integration of family stress research, McCubbin and Patterson's (1983a) Double ABCX model of adjustment and adaptation, and McCubbin and McCubbin's (1987) T-Double ABCX model of family adjustment and adaptation. Based on propositions derived from these models (Bowen, 1990; McCubbin & McCubbin, 1987, 1989) as well as a number of studies that have provided empirical support for these propositions (Bowen, 1989a; Lavee, McCubbin, & Patterson, 1985; McCubbin & Lavee, 1986; Pittman & Lloyd, 1988), both stressors and adaptive resources were hypothesized to explain a unique and significant proportion of variation in the level of family adjustment that is reported by single parent soldiers. More specifically, measures related to work stressors were hypothesized to negatively contribute to family adjustment. On the other hand, measures related to both family and community resources and Army support services were hypothesized to positively contribute to family adjustment.

## Method

### Source of Data

The data for this analysis were based on a stratified probability sample of 20,033 active duty officers and enlisted personnel serving in the U.S. Army worldwide who were selected to participate in the 1989 Army Soldier and Family Survey. Of the 14,371 soldiers who remained eligible to participate after data collection delays and complications, 11,035 returned usable questionnaires, a 77% effective response rate. Respondents represented a total of 528 units across 34 geographic locations.

Approximately two percent of these soldiers ( $n = 238$ ) identified themselves as never married, divorced, legally separated, or widowed with dependent children living in the household. The present analysis was restricted to these single parent soldiers, which included 94 single fathers and 144 single mothers.

The sample was chosen using a multi-stage cluster strategy. The first stage consisted of a probability sampling of installations across geographic regions. The second stage consisted of units within chosen installations. The third stage consisted of soldiers within selected units. Soldiers were stratified by pay grade, sex, and marital status, with an oversampling of officers, married personnel, and females.

Soldiers were eligible to participate if they were assigned to an eligible unit at the time of sample selection (February 1989 to March 1989) and remained assigned to the same unit at the point of data collection (February 1989 to December 1989). Included were soldiers in pay grades E2 (Private) to O6 (Colonel) who were not absent without leave (AWOL), hospitalized, incarcerated, or detached from their units during data collection.

Because of oversampling of officers and females, variations in the response rates of selected subgroups, the relatively small number of single parent soldiers who participated in the study, and the decision not to weight the data for purposes of analysis, the characteristics of the sample may vary in unknown ways from the population of single parents serving on active duty in the U.S. Army at the time of sample selection and data collection. As a consequence, the reader should exercise caution in attempting to extrapolate study findings to the single parent population in the U.S. Army.

For a more comprehensive description of the design and implementation of the 1989 Army Soldier and Family Survey, the reader should consult the Report on Survey Implementation (Research Triangle Institute, 1990a).

### Sample Profile

The general characteristics and the military profile of the sample respondents can be found in Table 1 and Table 2, respectively. As seen in Table 1, the mean age of respondents was 29.9 years, and the modal respondent was a nonhispanic white (51.3%). Of these, 50.4% had received at least some post secondary education, 76.9% were formerly married, 50% had one child, and 62.1% had a youngest child five years old or younger.

When the general characteristics of single fathers and single mothers were compared using either a t-test or a chi-square statistic, a number of statistically significant between group differences appeared ( $p < .05$ ). Compared to single fathers, a higher proportion of single mothers reported a minority racial/ethnic group identification, had received at least a high school diploma but not a college degree, had only one child, and had a youngest child five years old or younger. In addition, on the average, single mothers were younger than single fathers.

Table 1

General Characteristics of Sample

| Characteristics                        | Combined Sample<br>(n = 238) | Single Fathers<br>(n = 94) | Single Mothers<br>(n = 144) |
|--|------------------------------|----------------------------|-----------------------------|
| Mean Age<br>$t(169) = 3.64, p < .00^a$ | 29.9                         | 31.9                       | 28.6                        |
| Racial/Ethnic Group (%)                |                              |                            |                             |
| White NonHispanic                      | 51.3                         | 71.0                       | 38.1                        |
| Black NonHispanic                      | 42.2                         | 24.7                       | 54.0                        |
| Other                                  | 6.5                          | 4.3                        | 7.9                         |
| $X^2(2) = 24.1^{**}$                   |                              |                            |                             |
| Education (%)                          |                              |                            |                             |
| GED                                    | 7.7                          | 14.9                       | 2.9                         |
| High school diploma                    | 41.9                         | 29.8                       | 50.0                        |
| Some post-secondary                    | 30.8                         | 24.5                       | 35.0                        |
| Bachelor's degree or beyond            | 19.6                         | 30.8                       | 12.1                        |
| $X^2(3) = 28.1^{**}$                   |                              |                            |                             |
| Single Status (%)                      |                              |                            |                             |
| Never married                          | 23.1                         | 17.0                       | 27.1                        |
| Legally separated                      | 34.5                         | 36.2                       | 33.3                        |
| Divorced                               | 40.8                         | 43.6                       | 38.9                        |
| Widowed                                | 1.6                          | 3.2                        | 0.7                         |
| $X^2(3) = 5.0$                         |                              |                            |                             |
| Number of Children (%)                 |                              |                            |                             |
| One                                    | 50.0                         | 37.2                       | 58.3                        |
| Two                                    | 36.1                         | 39.4                       | 34.0                        |
| Three or more                          | 13.9                         | 23.4                       | 7.7                         |
| $X^2(2) = 15.7^{**}$                   |                              |                            |                             |
| Age of Youngest Child (%)              |                              |                            |                             |
| Less than one year                     | 13.1                         | 5.8                        | 17.6                        |
| 1 to 2                                 | 24.5                         | 21.8                       | 26.1                        |
| 3 to 5                                 | 24.5                         | 20.7                       | 26.8                        |
| 6 to 9                                 | 19.2                         | 18.4                       | 19.7                        |
| 10 and older                           | 18.7                         | 33.3                       | 9.8                         |
| $X^2(4) = 22.9^{**}$                   |                              |                            |                             |

<sup>a</sup> Unequal variances estimate.

\*  $p < .05$ . \*\* $p < .01$ .

Table 2

Military Profile of Sample

| Characteristics                                      | Combined<br>Sample<br>(n = 238) | Single<br>Fathers<br>(n = 94) | Single<br>Mothers<br>(n = 144) |
|--|---------------------------------|-------------------------------|--------------------------------|
| Mean Years in Service<br>$t(163.2) = 5.6, p < .00^a$ | 7.9                             | 10.3                          | 6.3                            |
| Pay Grade/Rank (%)                                   |                                 |                               |                                |
| E2 to E4 (PVT to CPL)                                | 44.1                            | 25.5                          | 56.3                           |
| E5 to E6 (SGT to SSG)                                | 32.8                            | 36.2                          | 30.6                           |
| E7 to E9 (SFC to SGM)                                | 10.1                            | 16.0                          | 6.3                            |
| O1 to O6 (2LT to COL)                                | 13.0                            | 22.3                          | 6.8                            |
| $X^2(3) = 28.3^{**}$                                 |                                 |                               |                                |
| Location (%)   |                                 |                               |                                |
| CONUS  | 63.0                            | 72.3                          | 56.9                           |
| EUROPE   | 29.4                            | 20.2                          | 35.4                           |
| Other OCONUS   | 7.6                             | 7.5                           | 7.7                            |
| $X^2(2) = 6.6^*$                                     |                                 |                               |                                |
| Major Command (%)                                    |                                 |                               |                                |
| FORSCOM  | 37.4                            | 44.7                          | 32.6                           |
| TRADOC   | 12.2                            | 14.9                          | 10.4                           |
| USAREUR  | 22.3                            | 14.9                          | 27.1                           |
| Health services command                              | 12.6                            | 10.6                          | 13.9                           |
| Other  | 15.5                            | 14.9                          | 16.0                           |
| $X^2(4) = 7.5$                                       |                                 |                               |                                |
| Unit Type (%)  |                                 |                               |                                |
| Combat   | 20.6                            | 35.1                          | 11.1                           |
| Combat support                                       | 10.5                            | 9.6                           | 11.1                           |
| Combat support service                               | 26.9                            | 10.6                          | 37.5                           |
| TDA  | 42.0                            | 44.7                          | 40.3                           |
| $X^2(3) = 31.6^{**}$                                 |                                 |                               |                                |
| On-Post Housing (%)                                  | 29.7                            | 25.8                          | 32.2                           |
| $X^2(1) = 1.1$                                       |                                 |                               |                                |

<sup>a</sup> Unequal variances estimate.\*  $p < .05$ . \*\*  $p < .01$ .

As shown in Table 2, respondents had served an average of 7.9 years in the military. The modal respondent was a junior enlisted soldier (44.1%), who was located in CONUS (63.0%), was assigned to FORSCOM (37.4%), served in a TDA unit (42.0%), and lived in off-post housing (70.3%). Compared to single fathers, single mothers had served fewer years in service, and a higher proportion was junior enlisted, lived in a non-CONUS location, and served in a non-combat unit. Each of these comparisons were statistically significant when examined with either the t or chi-square statistic ( $p < .05$ ).

### **Data Collection**

Trained data collection teams visited each installation to administer a self-report questionnaire to the sample soldiers. In most cases, group administration procedures were used to collect data. For those soldiers who could not attend a group session, the survey team made alternative arrangements to have the questionnaire delivered to them. In these cases, special information was provided to respondents that explained the purpose of the survey and instructed them about how to complete the questionnaire. In addition, a confidential package was included for returning the questionnaire to the survey team.

The questionnaire contained 449 closed-ended items. It was designed to collect information in eight major areas: (a) personal background of respondents, (b) work and unit characteristics, (c) individual and unit performance, (d) Army attitudes and values, (e) personal and family relationships, (f) Army commitments and retention intentions, (g) parental experience and roles, (h) community activities, and (i) use of and attitudes toward Army support programs and services. The survey was administered in a 28-page booklet, which was designed to be optically scanned. On the average, soldiers took 76 minutes to complete the questionnaire.

### **Measures**

Eight measures were used to examine the relationship between the dependent variable, family adjustment to Army life (1 measure) and three sets of independent variables: work stressors (2 measures), family and community resources (3 measures), and Army support resources (2 measures). The validity and reliability of these measures had been determined in earlier phases of the AFRP project (Research Triangle Institute, 1990b). As a strategy for screening independent variables for the current analysis, each independent measure was selected for inclusion based on three criteria: (a) it was conceptually related to its underlying latent domain, (b) it had been shown to be a theoretically and empirically meaningful correlate of family adjustment in earlier reviews and analysis, and (c) it demonstrated a statistically significant zero-order correlation with the family adjustment of either single fathers or single mothers in the present analysis (see Table 3 and Table 4).

All measures were coded such that the higher the value, the more positive the interpretation (i.e., high to low for stressor measures and low to high for resource measures). In the case of composite measures, related items were summed to create meaningful subscale scores. Table 5 provides descriptive statistics for all measures in the analysis, including alpha coefficients for each composite measure. In all cases, these alpha coefficients suggest that the composite scales have good internal consistency.

In addition to the dependent and independent measures, two single-item control variables were included in the analysis to attempt to better isolate the unique relationship

between the dependent variable and the independent variables in the analysis: military pay grade and the presence of preschool children in the household. Each of these variables had been demonstrated in prior research to be associated with variation in the dependent variable (Bowen, 1989a; Bowen, 1989b; Bowen & Orthner, 1986; McCubbin & Patterson, 1983b).

Because the pay grade of respondents was skewed toward a higher proportion of junior-enlisted soldiers, pay grade was coded as a dichotomous variable: 0 = Junior Enlisted (Private to Corporal), and 1 = other. The second control variable, preschool children, was also coded as a dichotomous variable in the analysis: 0 = youngest child less than five years of age, and 1 = youngest child five years of age or older.

**Family adjustment to Army life.** The dependent variable, family adjustment to Army life, was assessed by a single item. Respondents were asked to rate how well their family had adjusted to the demands of being an "Army family" on a 7-point Likert-type scale ranging from 1 ("extremely badly") to 7 ("extremely well").

**Work stressors.** Two areas of work stressors were defined as variables in the analysis. *Work predictability* included six items that assessed the extent to which work demands were unpredictable and intruded into hours that soldiers often had available to spend time with their families (e.g., "You have to cancel leave or important personal/family plans because of your work requirements"). Each item was rated on a five-point scale (1-5) from "very often or always" to "very seldom or never."

*Work stress* was measured by three items that indicated the extent to which soldiers came home at the end of their duty too tired or too emotionally drained to enjoy themselves and to engage with others. Items were measured on a 6-point scale (1-6) from "almost every day" to "almost never."

**Family and community resources.** Three indices of family and community resources were considered in the present analysis. The first indicator, *family strength*, was derived from the "manageability" subscale of Antonovsky and Sourani's (1988) measure of family coherence. Consisting of three items, this measure captures the sense of confidence that soldiers have in the ability of their families to remain optimistic in rough periods, cooperate together when times are tough, and to solve problems. Each item was assessed on a 7-point scale, coded from low to high.

*Relationship status* was determined by a 3-level Guttman-type scale based on whether soldiers were "engaged or significantly involved" in a relationship with someone. Soldiers who answered "no" were classified as "independent." Among those who answered "yes," the seriousness of that relationship was defined by how frequently the soldier had discussed marriage with his or her girlfriend or boyfriend. Those who indicated they never, seldom, or only sometimes discussed marriage were classified as "involved." Those who indicated they had discussed marriage often or very often were defined as "committed." Responses ranged from 0 ("independent") to 2 ("committed").

*Social support availability* was measured by a 6-item scale that assessed the level of support that soldiers could expect at their current location from either a friend, neighbor, or relative outside the home under six hypothetical situations (e.g., listen to you when you need to talk, go with you to do something enjoyable, provide transportation when you need it). Each item was assessed on a 3-point scale (1-3) from "no" to "yes always."

Table 3

Correlation Matrix for Males<sup>a</sup>

| Variables                          | Correlation |        |       |        |        |       |        |        |        |    |
|------------------------------------|-------------|--------|-------|--------|--------|-------|--------|--------|--------|----|
| 1. Family Adjustment to Army       | 1           |        |       |        |        |       |        |        |        |    |
| 2. Pay Grade <sup>b</sup>          | .080        | 2      |       |        |        |       |        |        |        |    |
| 3. Preschool Childre <sup>c</sup>  | .243*       | .522** | 3     |        |        |       |        |        |        |    |
| 4. Work Predictability             | .158        | -.035  | .001  | 4      |        |       |        |        |        |    |
| 5. Work Stress                     | .220        | .177   | .249* | .498** | 5      |       |        |        |        |    |
| 6. Family Strength                 | .471**      | -.036  | .009  | .102   | .343** | 6     |        |        |        |    |
| 7. Relationship Status             | .351**      | -.135  | -.037 | .094   | .210   | -.223 | 7      |        |        |    |
| 8. Social Support Availability     | .282*       | .044   | -.063 | .176   | .174   | .311* | .349** | 8      |        |    |
| 9. Army Policies Support           | .384**      | -.078  | .075  | .268*  | .446** | .248* | .202   | .358** | 9      |    |
| 10. Unit Supervisor Family Support | .097        | .315** | .191  | .344*  | .407** | .100  | .041   | .211   | .336** | 10 |

<sup>a</sup> n = 76<sup>b</sup> Dummy variable: 0 = Junior Enlisted (Private to Corporal), and 1 = other.<sup>c</sup> Dummy variable: 0 = youngest child less than five years old, and 1 = youngest child five years old or older.

\* p &lt; .05, two-tailed. \*\* p &lt; .01, two-tailed.

Table 4

Correlation Matrix for Females<sup>a</sup>

| Variables                          | Correlation |        |       |        |        |        |       |      |       |     |
|------------------------------------|-------------|--------|-------|--------|--------|--------|-------|------|-------|-----|
| 1. Family Adjustment to Army       | .1          |        |       |        |        |        |       |      |       |     |
| 2. Pay Grade <sup>b</sup>          | .264**      | .2     |       |        |        |        |       |      |       |     |
| 3. Preschool Childre <sup>c</sup>  | .306**      | .330** | .3    |        |        |        |       |      |       |     |
| 4. Work Predictability             | .340**      | -.080  | .145  | .4     |        |        |       |      |       |     |
| 5. Work Stress                     | .422**      | .129   | .157  | .391** | .5     |        |       |      |       |     |
| 6. Family Strength                 | .439**      | .114   | .176  | .222*  | .395** | .6     |       |      |       |     |
| 7. Relationship Status             | .047        | -.180  | -.090 | .033   | -.012  | .046   | .7    |      |       |     |
| 8. Social Support Availability     | .094        | -.077  | .018  | .050   | .242*  | .228*  | .181  | .8   |       |     |
| 9. Army Policies Support           | .381**      | .005   | .136  | .090   | .227   | .290** | -.038 | .143 | .2    |     |
| 10. Unit Supervisor Family Support | .279**      | .059   | .144  | .408** | .337** | .115   | -.085 | .192 | .198* | .10 |

<sup>a</sup> n = 123.<sup>b</sup> Dummy variable: 0 = Junior Enlisted (Private to Corporal), and 1 = other.<sup>c</sup> Dummy variable: 0 = youngest child less than five years old, and 1 = youngest child five years old or older.

\* p &lt; .05, two-tailed. \*\* p &lt; .01, two-tailed.

Table 5

## Descriptive Statistics for Measures in the Analysis

| Scales                         | Range             | Mean  | SD   | SE   | Skew  | Kurtosis | Items | Alpha |     |       |
|--------------------------------|-------------------|-------|------|------|-------|----------|-------|-------|-----|-------|
|                                |                   |       |      |      |       |          |       | Total | Men | Women |
| Grade                          | 0-1 <sup>a</sup>  | 0.55  | 0.49 | 0.03 | -0.24 | -1.96    | 1     |       |     |       |
| Preschool Children             | 0-1 <sup>b</sup>  | 0.48  | 0.50 | 0.03 | 0.09  | -2.01    | 1     |       |     |       |
| Work Predictability            | 5-30 <sup>c</sup> | 21.31 | 4.86 | 0.32 | -0.29 | -0.57    | 6     | .78   | .77 | .76   |
| Work Stress                    | 3-18 <sup>d</sup> | 10.30 | 3.61 | 0.23 | -0.03 | -0.60    | 3     | .75   | .72 | .76   |
| Family Strength                | 3-21 <sup>e</sup> | 15.88 | 3.57 | 0.24 | -0.46 | -0.31    | 3     | .72   | .74 | .67   |
| Relationship Status            | 0-2 <sup>f</sup>  | 0.79  | 0.81 | 0.05 | 0.40  | -1.37    | 1     |       |     |       |
| Social Support Availability    | 6-18 <sup>g</sup> | 13.63 | 3.55 | 0.23 | -0.40 | -0.84    | 6     | .90   | .87 | .90   |
| Army Policy Support            | 8-40 <sup>h</sup> | 26.22 | 5.58 | 0.38 | -0.04 | 1.22     | 8     | .76   | .86 | .70   |
| Unit Supervisor Family Support | 4-20 <sup>i</sup> | 14.06 | 4.03 | 0.26 | -0.59 | -0.26    | 4     | .88   | .89 | .88   |
| Family Adjustment to Army      | 1-7 <sup>j</sup>  | 4.93  | 1.63 | 0.11 | -0.64 | -0.19    | 1     |       |     |       |

<sup>a</sup> 0 = Private to Corporal, 1 = Other;

<sup>b</sup> 0 = Youngest Child Less than Five, 1 = Youngest Child Five or Older;

<sup>c</sup> Low to high work predictability;

<sup>d</sup> High to low work stress;

<sup>e</sup> Low to high family strength;

<sup>f</sup> 0 = No significant involvement with boy/girlfriend, 1 = Boy/girlfriend but never or infrequently discuss marriage, 3 = Boy/girlfriend and often discuss marriage;

<sup>g</sup> Low to high social support availability;

<sup>h</sup> Low to high Army policies support;

<sup>i</sup> Low to high unit supervisor family support;

<sup>j</sup> Low to high family adjustment.

Army support resources. Two scales were used to assess Army support resources. The first, *Army policy support*, was determined by eight items that asked soldiers to rate the helpfulness of a number of Army policies that may affect families, such as family support during deployment, permanent change of station, military child care priority, and emergency financial assistance. Each item was evaluated on a 5-point response continuum (1-5) from "very harmful" to "very helpful."

The second, *Unit supervisor family support*, was assessed by having soldiers evaluate the responsiveness of their supervisor to family welfare and to the needs and situations that sometimes confront soldiers in their work unit. Four items were rated by soldiers on a 4-point response continuum (1-4) from "very seldom or never" to "very often or always," including the willingness of the supervisor to listen to a soldier with a family problem, the degree to which the supervisor showed a genuine interest in the welfare of families, and the willingness of the supervisor to allow soldiers off for urgent family matters.

### Data Analysis

The analysis strategy involved two stages. In the first stage of analysis, a series of t-tests were performed to test for differences between single fathers and single mothers across each variable in the analysis. To reduce the probability of Type 1 error, a .01 level of statistical significance was used to evaluate results from this analysis.

Hierarchical multiple regression was used in the second stage of analysis, and separate analyses were conducted for single fathers and single mothers. Following a strategy used by Pittman and Lloyd (1988) in an earlier analysis of the effects of stressors and adaptive resources on family outcomes, a series of blockwise hierarchical regressions were conducted to compare the relative contribution of sets of variables to explaining variation in the family adjustment of single fathers and single mothers as well as to examine the effects of all variables simultaneously (the full model). An approach that enters sets of conceptually related variables as blocks in the analysis is likely to lead to greater understanding of the unique contribution of these types of variables than a simultaneous approach that is restricted to examining the unique effect of each variable beyond all other variables in the analysis (Greenberger, Goldberg, Hamill, O'Neil, and Payne, 1989).

In the first step of each regression, two control variables (pay grade and preschool children) were entered as a block into the regression equation to help take into account their potential effect as background variables. Since the results from this step are identical in each regression run, the unique contribution from the demographic variables alone is presented only once. In the second step, the set of variables measuring work stressors was entered while withholding the two sets of resource variables: family and community resources and Army support resources. Family and community resources were entered as a set in the third step while withholding work stressors and Army support resources. In step 4, the contribution of the cluster of variables dealing with Army support resources was assessed while withholding work stressors and family and community resources from the model. In the fifth step, the combined contributions of both sets of resource variables were examined while withholding work stressors. Finally, in the last step, all sets of variables were entered simultaneously.

At step 2 through step 6 in the regression analysis, increments in the level of variance explained by the model were examined: that is, the increase in the  $R^2$  that is achieved by

adding the variables in the respective step to the two demographic control variables in step 1. The change in  $R^2$  from one step to the next permits a comparison of the relative contribution of each set of variables to explaining variation in the dependent variable. Based on a formula suggested by Cohen and Cohen (1975, p. 136), F tests were conducted to evaluate the increment in explained variance at each step in the analysis. Individual predictors within clusters or sets of conceptually related variables are discussed only in the presentation of the full model. A .05 level of probability was used to determine statistical significance of this incremental change in variance, the overall significance of the model at each step, and the effect of predictor variables in the full model.

As a precursor to the regression analysis, the possibility of high collinearity between independent and control variables in the analysis was addressed for both single fathers and single mothers. High collinearity in models can bias parameter estimates and lead to unreliable inferences. First, the bivariate correlation matrix between independent and control variables in the analysis was examined. As seen in Table 3 and Table 4, correlations between variables were low to moderate in magnitude. Next, as discussed by Belsley, Kuh, and Welsch (1980), the variances of each of the regression coefficients were decomposed into a sum of components that are attributable to each of the eigenvalues. The results from this analysis revealed little dependency between independent and control variables in the analysis. Last, each independent variable and control variable was regressed on all others in the analysis. Considered by Lewis-Beck (1980) to be the "preferred method" for assessing multicollinearity, the results from this analysis confirmed the lack of dependency between independent and control variables.

## Results

As presented in Table 6, several significant differences were found between single fathers and single mothers on variables in the analysis. When the respective means of the two groups on the dependent variable were compared, single mothers ( $M = 5.22$ ) reported a higher level of family adjustment to the Army than single fathers ( $M = 4.45$ ). Yet, given that the dependent variable was measured on a 7-point scale from "extremely bad" to "extremely well," both groups generally seemed to feel that their families were adjusting to the demands of being an Army family.

Table 6

**Means and Standard Deviations for Single Fathers and Single Mothers  
on Variables in the Analysis**

| Variables                      | Single Fathers |      | Single Mothers |      | T-Test                         |
|--------------------------------|----------------|------|----------------|------|--------------------------------|
|                                | M              | SD   | M              | SD   |                                |
| Grade                          | 0.74           | 0.44 | 0.44           | 0.50 | t (236) = 4.87**               |
| Preschool Children             | 0.55           | 0.50 | 0.43           | 0.50 | t (227) = 1.80                 |
| Work Predictability            | 19.62          | 4.80 | 22.43          | 4.58 | t (235) = -4.52**              |
| Work Stress                    | 10.16          | 3.57 | 10.39          | 3.65 | t (236) = -0.48                |
| Family Strength                | 14.67          | 3.75 | 16.63          | 3.25 | t (228) = -4.19**              |
| Relationship Status            | 0.77           | 0.85 | 0.80           | 0.79 | t (226) = -0.25                |
| Social Support Availability    | 12.40          | 3.52 | 14.42          | 3.35 | t (233) = -4.43**              |
| Army Policy Support            | 24.88          | 6.15 | 27.10          | 5.00 | t (160) = -2.82** <sup>a</sup> |
| Unit Supervisor Family Support | 14.19          | 3.82 | 13.97          | 4.18 | t (235) = 0.40                 |
| Family Adjustment to Army      | 4.45           | 1.67 | 5.22           | 1.54 | t (229) = -3.58**              |

<sup>a</sup> Unequal variance estimate

\* p < .05. \*\* p < .01.

When the two groups were compared on the two work stressor variables, significant differences were revealed on one of the two variables: work predictability. Single fathers reported lower work predictability than single mothers. The same pattern was found in comparisons involving family and community resource variables and Army support resource variables. Compared to single fathers, single mothers reported higher family strength, greater social support availability, and more helpful Army policy support.

Last, a significant between group difference was found on one of the two demographic variables that were used as controls in the regression analysis. Single fathers were more likely to report that they were in a higher pay grade than single mothers. When considered together, the results from this comparative analysis supported the decision to conduct separate regression analyses of single fathers and single mothers.

**Regression Analysis: Single Fathers**

As presented in Table 7, the two demographic factors that were examined as control variables did not explain a significant proportion of variance in the family adjustment of single fathers in the first step of the analysis. Together, these variables accounted for less than 4% of the total variance in family adjustment ( $R^2 = .037$ ,  $p > .05$ ).

As a set, measures of work stressors (step 2) did not exert a unique effect beyond the effect of demographic variables in the analysis ( $R^2$  change = .010,  $F_{2, 71} = 0.35$ ,  $p > .05$ ).

Yet, in step 3 through step 5, the set or sets of resource variables in the analysis each contributed significantly to the explanation of family adjustment beyond the effect of demographic controls.

In step 3, measures of family and community resources explained an additional 27% of the variance in the family adjustment of single fathers ( $R^2$  change = .273,  $F_{3, 70} = 9.23$ ,  $p < .01$ ). While also explaining a significant proportion of additional variance in the family adjustment of single fathers, measures of Army support resources (step 4) had a less powerful influence on family adjustment than did measures of family and community resources ( $R^2$  change = .118,  $F_{2, 71} = 4.93$ ,  $p < .01$ ). In fact, measures of family and community resources alone explained nearly as much additional variance in family adjustment as did the combined resource analysis in step 5 ( $R^2 = .308$ ,  $F_{5, 68} = 6.39$ ,  $p < .01$ ).

The relative contribution of each set of resource measures to explaining variation in the family adjustment of single fathers can be compared by viewing their combined influence in step 5 in the context of their separate explanatory power in step 3 and step 4. The addition of Army support resources to the family and community resources model yielded a small and insignificant increment in explained variance ( $R^2$  change = .035,  $F_{2, 70} = 1.77$ ,  $p > .05$ ). On the other hand, the addition of family and community resources to the Army support resources model produced a large and significant increment in the explanation of variation in the dependent variable ( $R^2$  change = .190,  $F_{3, 70} = 6.41$ ,  $p < .01$ ). This finding suggests that when the analysis is restricted to resources alone, family and community resources exert a more powerful influence in explaining variation in the family adjustment of single fathers than Army support resources.

The full model, which is presented in step 6, explained nearly 33% of the variance in family adjustment after the set of demographic variables were entered into the regression equation ( $R^2$  change = 0.325,  $F_{7, 66} = 4.79$ ,  $p < .01$ ). Comparison of the full model with the resources only model in step 5 and the stressors only model in step 2 provides a means to compare the relative contribution of stressors and resources to explaining variation in the family adjustment of single fathers. Adding stressors to the combined resource model increased the amount of explained variance by a small and insignificant margin ( $R^2$  change = .017,  $F_{2, 68} = 1.70$ ,  $p > .05$ ). On the other hand, adding resources to the stressors only model contributed substantially to the explanation of variation in the dependent variable ( $R^2$  change = .315,  $F_{5, 68} = 6.35$ ,  $p < .01$ ). Together, these findings suggest that resources are a more powerful contributor than stressors to the family adjustment of single fathers.

Three of the seven independent variables in the full model produced significant weights. Higher family adjustment was associated with higher family strength, a more committed level of relationship involvement, and feeling support from Army policies. Of these variables, family strength had the greatest overall effect ( $B = .413$ ,  $p < .01$ ), followed by Army policy support ( $B = .316$ ,  $p < .01$ ) and relationship status ( $B = .258$ ,  $p < .05$ ). In addition, a significant effect was found for one of the two control variables: preschool children. Single fathers whose youngest child was five years of age or older reported higher family adjustment than those with younger children in the household.

Table 7

Hierarchical Multiple Regression Predicting Family Adjustment to the Army for Single Fathers<sup>a</sup>

| Variable                                | Step 1 |        | Step 2 |        | Step 3  |         | Step 4  |         | Step 5  |         | Step 6  |         |
|---|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
|   | B      | Beta   | B      | Beta   | B       | Beta    | B       | Beta    | B       | Beta    | B       | Beta    |
| <b>Demographics</b>                     |        |        |        |        |         |         |         |         |         |         |         |         |
| Pay Grade                               | -0.237 | -0.065 | -0.249 | -0.069 | -0.057  | -0.016  | 0.090   | 0.025   | 0.220   | 0.061   | 0.376   | 0.103   |
| Preschool Children                      | 0.875  | 0.277* | 0.783  | 0.248  | 0.829   | 0.263*  | 0.685   | 0.217   | 0.691   | 0.219   | 0.786   | 0.249*  |
| <b>Stressors</b>                        |        |        |        |        |         |         |         |         |         |         |         |         |
| Work Predictability                     |        |        | 0.031  | 0.093  |         |         |         |         |         |         | 0.053   | 0.163   |
| Work Stress                             |        |        | 0.057  | 0.124  |         |         |         |         |         |         | -0.107  | -0.236  |
| <b>Family &amp; Community Resources</b> |        |        |        |        |         |         |         |         |         |         |         |         |
| Family Strength                         |        |        |        |        | 0.165   | 0.385** |         |         | 0.153   | 0.356** | 0.177   | 0.413** |
| Relationship Status                     |        |        |        |        | 0.456   | 0.239*  |         |         | 0.435   | 0.229*  | 0.492   | 0.258*  |
| Social Support Availability             |        |        |        |        | 0.043   | 0.096   |         |         | 0.014   | 0.031   | -0.002  | -0.005  |
| <b>Army Support Resources</b>           |        |        |        |        |         |         |         |         |         |         |         |         |
| Army Policy Support                     |        |        |        |        |         |         | 0.107   | 0.398** | 0.070   | 0.261*  | 0.085   | 0.316** |
| Unit Supervisor Family Support          |        |        |        |        |         |         | -0.035  | -0.087  | -0.042  | -0.104  | -0.041  | -0.101  |
| Constant                                | 4.118  |        | 2.996  |        | 0.764   |         | 1.861   |         | 0.068   |         | -0.645  |         |
| Multiple R                              | 0.192  |        | 0.217  |        | 0.557   |         | 0.394   |         | 0.587   |         | 0.602   |         |
| R <sup>2</sup>                          | 0.037  |        | 0.047  |        | 0.310** |         | 0.155** |         | 0.345** |         | 0.362** |         |
| R <sup>2</sup> Change                   |        |        | 0.010  |        | 0.273** |         | 0.118** |         | 0.308** |         | 0.325** |         |

<sup>a</sup>n = 76

\* p &lt; .05 \*\* p &lt; .01

## **Regression Analysis: Single Mothers**

Table 8 presents the results from the hierarchical multiple regressions for single mothers. As compared to the male comparison sample, the two demographic control variables explained a greater proportion of variance in the family adjustment of single mothers in the first step of analysis. Together, these variables accounted for about 11% of the total variance in family adjustment ( $R^2 = .109$ ,  $p < .05$ ).

As a set, measures of work stressors (step 2) exerted a slightly greater effect beyond the effect of demographic variables in the analysis than either set of resource variables alone. While measures of stressors contributed about 16% to the explanation of variance in step 2 ( $R^2$  change = .164,  $F_{2, 118} = 13.28$ ,  $p < .01$ ), about 14% additional variance in the family adjustment of single mothers were explained by measures of family and community resources in step 3 ( $R^2$  change = .135,  $F_{3, 117} = 6.98$ ,  $p < .01$ ) and measures of Army support resources in step 4 ( $R^2$  change = .143,  $F_{2, 118} = 11.21$ ,  $p < .01$ ).

Yet, the combined resource model in step 5 contributed an additional 23% to the explanation of variance in family adjustment ( $R^2$  change = .226,  $F_{5, 115} = 7.80$ ,  $p < .01$ ). As contrasted to the resources only model for single fathers, both sets of resources made statistically significant and unique contributions to the explanation of family adjustment when their combined influence in step 5 was examined in the context of their separate influences in step 3 and step 4. The addition of Army support resources to the family and community resources model yielded an increment in explained variance of about 9% ( $R^2$  change = .091,  $F_{2, 117} = 6.90$ ,  $p > .01$ ). Likewise, the addition of family and community resources to the Army support resources model produced a similar increment in explained variance ( $R^2$  change = .083,  $F_{3, 117} = 4.17$ ,  $p < .01$ ). This finding suggests that when the analysis is restricted to resources alone, both sets of resources are important in understanding the family adjustment of single mothers.

The full model, which is presented in step 6, explained nearly 27% of the variance in family adjustment after the set of demographic variables were entered into the regression equation ( $R^2$  change = 0.273,  $F_{7, 113} = 7.10$ ,  $p < .01$ ). Comparison of the full model with the resources only model in step 5 and the stressors only model in step 2 provides a means to compare the relative contribution of stressors and resources to explaining variation in the family adjustment of single mothers. Adding stressors to the combined resources model increased the amount of explained variance by a relatively small but significant margin ( $R^2$  change = .047,  $F_{2, 115} = 3.71$ ,  $p < .05$ ). On the other hand, the contribution of resources to the stressors only model was substantially larger ( $R^2$  change = .109,  $F_{5, 115} = 3.45$ ,  $p < .01$ ). In combination, these findings suggest that while both stressors and resources contribute uniquely to explaining variation in the family adjustment of single mothers, resources are a more powerful set of explanatory factors than stressors.

Table 8

Hierarchical Multiple Regression Predicting Family Adjustment to the Army for Single Mothers<sup>a</sup>

| Variable                                | Step 1  |        | Step 2  |         | Step 3  |         | Step 4  |         | Step 5  |         | Step 6  |         |
|---|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|   | B       | Beta   | B       | Beta    | B       | Beta    | B       | Beta    | B       | Beta    | B       | Beta    |
| <b>Demographics</b>                     |         |        |         |         |         |         |         |         |         |         |         |         |
| Pay Grade                               | 0.555   | 0.182* | 0.575   | 0.189*  | 0.524   | 0.172*  | 0.593   | 0.195*  | 0.570   | 0.187*  | 0.622   | 0.204*  |
| Preschool Children                      | 0.754   | 0.46** | 0.512   | 0.167*  | 0.580   | 0.189*  | 0.529   | 0.173*  | 0.428   | 0.140   | 0.351   | 0.115   |
| <b>Stressors</b>                        |         |        |         |         |         |         |         |         |         |         |         |         |
| Work Predictability                     |         |        | 0.073   | 0.219*  |         |         |         |         |         |         | 0.059   | 0.176*  |
| Work Stress                             |         |        | 0.124   | 0.286** |         |         |         |         |         |         | 0.070   | 0.160   |
| <b>Family &amp; Community Resources</b> |         |        |         |         |         |         |         |         |         |         |         |         |
| Family Strength                         |         |        |         |         | 0.183   | 0.381** |         |         | 0.147   | 0.307** | 0.107   | 0.222** |
| Relationship Status                     |         |        |         |         | 0.146   | 0.076   |         |         | 0.218   | 0.113   | 0.212   | 0.110   |
| Social Support Availability             |         |        |         |         | 0.004   | 0.010   |         |         | -0.023  | -0.050  | -0.025  | -0.055  |
| <b>Army Support Resources</b>           |         |        |         |         |         |         |         |         |         |         |         |         |
| Army Policy Support                     |         |        |         |         |         |         | 0.095   | 0.321** | 0.073   | 0.247** | 0.073   | 0.246** |
| Unit Supervisor Family Support          |         |        |         |         |         |         | 0.064   | 0.179*  | 0.065   | 0.183*  | 0.025   | 0.070   |
| Constant                                | 4.701   |        | 1.826   |         | 1.533   |         | 1.305   |         | -0.391  |         | -1.152  |         |
| Multiple R                              | 0.330   |        | 0.487   |         | 0.494   |         | 0.502   |         | 0.579   |         | 0.618   |         |
| R <sup>2</sup>                          | 0.109** |        | 0.273** |         | 0.244** |         | 0.252** |         | 0.335** |         | 0.382** |         |
| R <sup>2</sup> Change                   |         |        | 0.164** |         | 0.135** |         | 0.143** |         | 0.226** |         | 0.273** |         |

<sup>a</sup>n = 123

\* p &lt; .05 \*\* p &lt; .01

Only three of the seven independent variables in the full model produced significant weights. Higher family adjustment was associated with greater work predictability, higher family strength, and feeling support from Army policies. Of these measures, Army policy support had the greatest effect ( $B = .246, p < .01$ ), followed by family strength ( $B = .222, p < .01$ ), and work predictability ( $B = .176, p < .05$ ). In addition, one of the two control variables produced a significant weight: Pay grade ( $B = .204, p < .05$ ). Single mothers who were in the more senior grades reported higher family adjustment than those who were in the junior enlisted pay grades (PVT to CPL).

## Discussion

Single fathers and single mothers in the sample each presented demographic profiles that could have positive implications for the successful integration of work and family roles and high family adjustment to the demands of being an Army family. Compared to single mothers, single fathers were older, had served more years in the Army on the average, and a higher proportion described themselves as college graduates. As a consequence, it is not surprising that a higher proportion would be in the upper pay grade groups, which are associated with greater responsibilities as well as higher pay, benefits, and opportunities. In addition, a higher proportion of single fathers than single mothers lived in CONUS, which may have advantages for maintaining contact with extended family and assessing support resources in the civilian community. In a recent analysis of the 1989 Army Soldier and Family Survey, Griffith and Helms (in preparation) found that soldiers in CONUS locations were less frequently called back to work to undertake some unscheduled task than soldiers in OCONUS locations.

A lower proportion of single fathers than single mothers also had a child in the younger age groups, especially a child less than a year old. One-third of single fathers reported that the age of their youngest child was 10 years or older; only 9.8% of single mothers reported a youngest child in that age range. While children present different issues and challenges across the developmental cycle, older children typically require less physical care and direct supervision than younger children, perhaps allowing these parents to better balance and negotiate work and family roles (Bowen & Orthner, 1986).

On the other hand, a higher proportion of single mothers than single fathers served in non-combat units, which may involve less immediate risk of injury or death in training or situations of armed conflict for single mothers. In addition, more than one-half (58.3%) of single mothers reported only one child in the household, and only 7.7% reported three or more children in the household. More than three out of five (62.8%) single fathers had more than one child in the household. The typically smaller families of single mothers as compared to single fathers may result in fewer parenting demands, which may equate with less work and family role strain (Pittman & Lloyd, 1988).

The demographic profiles of the sample single fathers and single mothers are each associated with unique structural issues in the U.S. military that may lead to difficulty in adjusting to the demands of being an Army family. Although an increasing number of men are accepting responsibility for fathering after a relationship breakup, it is still less common for men than for women to assume primary responsibility for children in a nonmarital status. The highly "masculinized" culture of the military and its orientation toward more traditional gender norms (Segal, 1989) may result in single fathers being viewed with some "skepticism" and "suspicion" by their commanders and peers (Orthner & Brown, 1978, p. 99).

While single mothering is both more common and accepted than single fathering as an societal pattern in both the civilian and the military communities, women in the military occupy a minority gender status--only about 10% of active duty service members are female (Shields, 1988; Stanley & Segal, 1988). While the proportion of women serving in the military has increased dramatically since the early 1970's, military leadership has resisted efforts to fully assimilate women into military roles (Shields, 1988).

Yet, sexism is but only one structural stress that single mothers may face. As indicated in the demographic profile of sample respondents, a larger proportion of single mothers (54.0%) than single fathers (24.7%) report their racial/ethnic identification as black nonHispanic. The number of black females serving on active duty has increased dramatically over the last decade, and they are more likely than either white or Spanish-American women to be single parents (Moore, 1991). As a consequence, single mothers are more likely than single fathers to face what Moore refers to as "double jeopardy": being both black and female. When their status as single parents is added, a situation of triple jeopardy may emerge.

These demographic comparisons of single fathers and single mothers provide a context for examining differences in their family adjustment, work stressors, and adaptive resources. While no explicit hypotheses were formulated to frame this comparison, in support of earlier research, single fathers reported more difficulties than single mothers in the comparative analysis. They reported not only lower overall family adjustment to the demands of Army life than single mothers, but also lower work predictability, lower family strength, less social support availability, and less helpful Army policy support.

Future research should examine each of these differences while controlling for differences in the full profiles of single fathers and single mothers. This recommended analysis was beyond the scope of the current investigation, and sample size limitations restricted the full use of demographic control variables and testing of interactions between variables in the models, especially within the male subsample.

The results from the hierarchical regression analysis suggest that resource variables are a more powerful set of factors than work stressors for both single fathers and single mothers in predicting perceived adjustment to the demands of being an Army family. However, there are important differences in how the two sets of resource variables operate for single fathers and single mothers, and these differences have implications for policy and practice interventions.

For single fathers, work stressors alone did not contribute a statistically significant increase in explained variance in family adjustment beyond the effect of demographic variables in the analysis. However, the set of family and community resource variables alone explained nearly as much additional variance as the full model, which included work stressors, family and community resources, and Army support resources. In addition, adding family and community variables to the Army support resources model added significantly to the proportion of variance explained. Yet, adding Army support resources to the family and community resources model alone did not yield a statistically significant increase in explained variance. These findings suggest that the family adjustment of single father families may best be strengthened by interventions that are focused on family and community resources.

When the results of the hierarchical regression analysis for single mothers are compared, the three models in which work stressors, family and community resources, and Army support resources were each added as a single set of variables to the demographic model alone contributed a statistically significant but similar proportion of explained variance. However, when the two sets of resource variables were combined, they explained approximately one-third more variance in the family adjustment of single mothers than any of the separate variable sets alone. In addition, when the explanatory power of the combined resource model was compared to the stressor only model, resources emerged as the more powerful set of explanatory factors. As compared to the results for single fathers, each set of resource measures produced a statistically significant and similar increment in explained variance when examined against the combined resource model. These findings suggest that the family adjustment of single mother families may best be strengthened by interventions that are focused on both family and community resources and Army support resources.

For both single fathers and single mothers, family strength emerged as an important predictor of family adjustment in the full model. This finding suggests that family adjustment is enhanced in families in which the members work cooperatively together as a team and maintain a sense of optimism and mastery. As hypothesized by Antonovsky and Sourani (1988), developers of the family sense of coherence scale from which this measure was derived, such a perspective of family strength is developed over time in the context of life experiences in which resources are available to meet presenting demands.

Army policy support also emerged as a significant predictor of family adjustment in the full model for both single fathers and single mothers. It is not surprising that single parents who feel that their families are best adjusting to the demands of being an Army family feel that policies that affect their families at their current location are most helpful. These policies, such as family support during deployment, on-post housing assignment, military child care priority, and emergency financial assistance provide a supportive context for single parents and reflect a positive respect and appreciation for the family responsibilities of service members.

Although no between group difference was found in the relationship status of single fathers and single mothers, the level of involvement in a personal relationship was found to be an important predictor of the family adjustment of single fathers. Given that single mothers were found to have greater social support availability than single fathers in the comparative analysis, single fathers may rely upon these relationships more than single mothers for instrumental and expressive support.

Not only did single mothers report a higher level of work predictability than single fathers in the comparative analysis, but also this variable emerged as a significant predictor of their family adjustment in the full model. Given that a higher proportion of single mothers than single fathers in the sample had children in the younger age brackets, especially infants, a greater degree of work predictability may be more important to them in balancing work and family demands.

Two variables in the regression analysis for single mothers, work stress and unit supervisor family support, followed a particularly interesting pattern as the analysis moved from partial models to the full model. Although both variables exerted a statistically significant effect when they were examined within their respective clusters, neither produced a statistically significant effect in the full model. It is likely that the moderate level of

correlation between the variables as seen in Table 3 ( $r = .337$ ) played a role in mitigating the contribution of these variables in the full model. Further analysis, including such strategies as path analysis and structural equation modeling, should be conducted to examine the interactions between work stressors and resources in influencing the family adjustment of single mothers.

A special concern in the present analysis was the relatively small sample of single fathers given the number of independent and control variables that were examined in the full model. Kerlinger and Pedhazur (1973) generally recommend a sample of at least 100 for regression analysis, and the general rule of thumb is to have 10 times as many respondents as there are independent variables in the regression analysis. Because the standard errors of regression weights increase as sample size decreases, special caution is advised in drawing inferences from the regression analysis involving single fathers.

Although the present investigation was largely exploratory, its findings provide an important context for further research and analysis. For example, it is recommended that future studies of single parents in the U.S. military either conduct separate analyses on single fathers and single mothers or use gender as a control variable in the analysis. In addition, the current results suggest that the presence of preschool children in the household may be a more important control variable for single fathers than for single mothers, while pay grade may be a more important control variable for single mothers. With larger samples, it will be possible to better understand the additive as well as the interactive contribution of these control variables in the analysis.

Further investigations should also examine the influence of additional stressor and resource variables on the family adjustment of single parents, as well as the direct and indirect contribution of these variables. For example, a set of family stressors, such as the nature and extent of family demands, could also be added to the model. In addition, the nonlinear as well as the linear contribution of these variables should be examined. The present analysis was limited to an examination of linear effects. For example, while high levels of stressors may lower family adjustment, low levels of stressors may not add to higher family adjustment. Such possibilities merit further exploration.

### **Recommendations for Policy and Practice**

Men are increasingly accepting their responsibility for fathering after relationship termination, and this responsibility is being recognized by the courts. In addition, it is likely that the participation of women in the Armed Forces will continue to increase, both as an actual proportion of the total force and in the nature of their assignments and responsibilities. Given these trends and projections, the number of single parents as a percentage of the force is likely to continue to increase, especially if rates of never married parenthood as well as marital separation and divorce do not abate. Given the established link between family adjustment and the retention and readiness of soldiers, it is in the military's best interest to strengthen the family adjustment of single parent soldiers. Based on the findings above, the following recommendations are offered for consideration.

*Offer support groups for single parent men.* Single fathers are more socially isolated than single mothers. Although the results from the present analysis suggests that their level of family adjustment is enhanced from involvement in interpersonal relationships, many of these men do not have a significant other. These men may be particularly vulnerable to

relationship isolation and loneliness. As a result, they may greatly benefit from a support group in which they are able to discuss parenting and lifestyle concerns.

Support groups for men will need to be very carefully developed. Single fathers do not often advertize their status as single parents even though they may have unmet social support needs. Support groups could be run by knowledgeable chaplains or Army Community Services personnel. Special training and materials on single parenthood can be developed and distributed to support agencies. Potential needs of single fathers could be identified and materials prepared for support group development, delivery and marketing.

*Strengthen formal social support systems for single parents.* Army policy support was found to be a significant predictor of family adjustment for both single fathers and single mothers. Policies concerning family support during deployments, emergency financial assistance, and military child care priority need to receive on-going review to ensure that they are being responsive to soldiers in need. Informing single parents about such policies is a first step in influencing their willingness to mobilize associated services and supports in times of need. Community education and outreach to "at risk" groups are critical components of an effective service delivery model.

*Develop a culture in the Army that recognizes and respects family diversity.* Single parents, especially single fathers, may feel like a "fifth wheel" in the Army community. The masculine culture and the traditional family model that are historical components of the Armed Forces may create a context that makes single parents feel like outsiders looking in. Although outright discrimination against nontraditional families may be more implicit than explicit, the consequences for single parents may be the same--a decrease in self respect and higher stress. Senior officers and leaders in the soldiers' unit or place of duty can play an instrumental role in challenging misconceptions about single parents and creating a culture in which soldiers are evaluated for the quality of their performance rather than the nature of their family status. A curriculum on the diversity of family patterns in the Army and their consequences for family adjustment should be included in command and NCO training.

*Commanders and unit supervisors need to recognize the potential for role strain and overload among single parents in their units* While all soldiers must carry their own weight in the unit, single parents may occasionally need some additional flexibility to meet their responsibilities at home. Without the backup support of another parent, these parents may also benefit from as much advanced notice as possible before unit-level exercises and deployments. Although all single parents are required to have dependency child care plans in effect, such advanced notification can help ensure that single parents make the necessary arrangements so that they can give their full attention to their work requirements. Most vulnerable are single fathers who may be less visible than single mothers to unit leadership, as well as less willing to express their needs openly to leaders and supervisors.

It is also important to make clear to Army leaders at all levels that single parent status is often temporary. Any parent can become a single parent if their spouse dies or if their marriage dissolves. The majority of single parents eventually marry or remarry, reestablishing the two-parent family. The greatest period of strain is in the first year of single parenthood as new family and work roles need to be negotiated. Assistance during this period should result in renewed commitments to work and the mission as well as higher work performance on the part of single parents.

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